

## SELECTED COASTAL SURFACE WATER POLLUTANTS IN SHELLFISH

### What does the indicator tell us?

**T**his indicator shows the percent change in concentration levels from 1986/87 to 1992/93 of six pollutants in shellfish (oysters and mussels) collected from about 140 locations along the Nation's coastline. The pollutants shown are six of the toxic chemicals of greatest concern in terms of their effects on the fish and other organisms in U.S. estuaries.

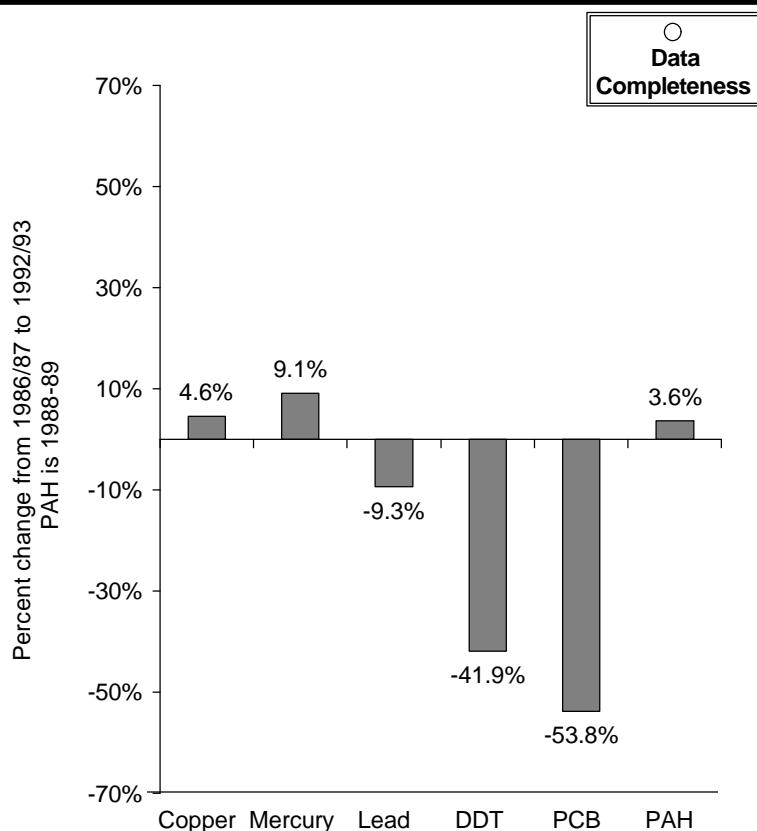
Three metals and three groups of organic chemicals are included. The metals copper, mercury, and lead are commonly used in our society for a number of purposes. The use of two of the organic chemicals included in this indicator, the DDT pesticides and the industrially important polychlorinated biphenyls (PCBs), was very common until about 20 years ago, and although these chemicals are now banned, they can still be found in the environment. The carcinogenic polycyclic aromatic hydrocarbons (PAHs) are common constituents of oil and are also produced by the burning of coal and wood.

As shown in the graph, concentration levels of DDT and PCBs decreased substantially from 1986/87 to 1992/93. During the same time period, concentration levels of lead and mercury showed evidence of a moderate decrease and increase, respectively, while copper showed little change. From 1988 to 1989 levels of PAHs also showed little change.

### How will the indicator be used to track progress?

**D**ata on these pollutant levels have been gathered by the National Oceanic and Atmospheric Administration (NOAA) since 1986. A survey to continue to measure the levels at the established study locations is being carried out every 2 years to furnish additional points for establishing trends in pollutant levels.

### INDICATOR 13: Selected Coastal Surface Water Pollutants in Shellfish



Source: National Oceanic and Atmospheric Administration, 1995

**What is being done to improve the indicator?**

**A**dditional results are being gathered as explained above. As part of NOAA's National Status and Trends monitoring program, additional chemicals (e.g., dioxin) are being added to the pollutants measured as concerns regarding these chemicals are identified.

**What is being done to improve conditions measured by the indicator?**

**A** number of control measures, such as eliminating the addition of lead to gasoline, forbidding the use of DDT and PCBs, and strengthening the requirements for removal of pollutants from treatment plant effluents, have been enacted over the past 25 years.

***For More Information:***

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